

Title (en)  
DRILL STRING TELEMETRY WITH INSULATOR BETWEEN RECEIVER AND TRANSMITTER

Title (de)  
MESSIGNALÜBERTRAGUNG FÜR BOHRGESTÄNGE MIT EINEM ISOLATOR ZWISCHEN DEM EMPFÄNGER UND DEM SENDER

Title (fr)  
APPAREIL DE TELEMETRIE DESTINE A UN TRAIN DE TIGES ET PRESENTANT UN ISOLANT ENTRE LE RECEPTEUR ET L'EMETTEUR

Publication  
**EP 1116350 A1 20010718 (EN)**

Application  
**EP 99943825 A 19990824**

Priority  
• GB 9818418 A 19980826  
• US 9919125 W 19990824

Abstract (en)  
[origin: WO0013349A1] The present invention is a well data telemetry apparatus and method of its use. The apparatus generally comprises a signal generator (12) capable of generating a signal at a first location of a well, a receiver (20) capable of detecting the signal at a position spaced from the generator, and an electrical insulator (26) disposed between at least a portion of the generator and the receiver. The apparatus preferably utilizes electromagnetic signals to gather telemetry data from an oil or gas well. The present invention is particularly useful as part of a drill string for gathering telemetry data concerning formation characteristics at or near the drill bit.

IPC 1-7  
**H04H 9/00**; **G01V 3/00**; **G01V 1/00**; **E21B 33/00**; **E21B 33/03**; **E21B 33/04**; **E21B 33/047**; **E21B 34/16**; **E21B 43/10**; **E21B 7/04**; **E21B 7/24**; **H01R 4/60**; **H01R 4/64**

IPC 8 full level  
**H04H 60/31** (2008.01); **E21B 47/12** (2012.01); **E21B 49/00** (2006.01); **G01V 1/52** (2006.01)

CPC (source: EP)  
**E21B 47/13** (2020.05); **E21B 49/00** (2013.01); **G01V 1/52** (2013.01)

Cited by  
DE102010047568A1; US9982529B2

Designated contracting state (EPC)  
DE FR GB IT NL

DOCDB simple family (publication)  
**WO 0013349 A1 20000309**; AU 5685199 A 20000321; AU 767959 B2 20031127; CA 2339556 A1 20000309; CA 2339556 C 20100518; DE 69930759 D1 20060518; EP 1116350 A1 20010718; EP 1116350 A4 20021002; EP 1116350 B1 20060405; GB 9818418 D0 19981021; NO 20006496 D0 20001220; NO 20006496 L 20010130; NO 321906 B1 20060717

DOCDB simple family (application)  
**US 9919125 W 19990824**; AU 5685199 A 19990824; CA 2339556 A 19990824; DE 69930759 T 19990824; EP 99943825 A 19990824; GB 9818418 A 19980826; NO 20006496 A 20001220